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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,119	10/28/2003	James W. Blease	85683D-W	6097

7590 06/15/2005

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EXAMINER

KLEMANSKI, HELENE G

ART UNIT PAPER NUMBER

1755

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/695,119

Applicant(s)

BLEASE ET AL.

Examiner

Helene Klemanski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/4/04&4/13/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: the Cross Reference to Related Applications on page 1 of the specification needs to be updated.

Appropriate correction is required.

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: (1) no literal antecedent basis is seen for any of the subject matter in claims 6-14; (2) no literal antecedent basis is seen for the phrase "wherein the organic solvent is selected from glycerol, diethylene glycol, diethylene glycol monobutyl ether, triethylene glycol monobutyl ether, 2-pyrrolidone, urea and mixtures thereof" in claim 16 (see page 7, lines 1-9 of the specification which discloses that these solvents are humectants and does not specify that they are choices for the organic solvent) and (3) no literal antecedent basis is seen for the phrase "wherein the concentration of organic solvents, and humectants is 5% to 50% by weight and water is 50% to 95% by weight" in claim 17 (see page 6, lines 27-30 and page 7, lines 10-17 of the specification which discloses that the organic solvents and humectants are present in an amount of 5-60% by weight).

The examiner suggests (1) the incorporation of the subject matter from claims 6-14 into the specification, (2) to specify that the solvents disclosed on page 7 of the specification are choices for the organic solvent and (3) the amount of the organic solvents and humectants correspond in the claims and specification.

Claim Objections

3. Claims 1, 4, 16 and 19 are objected to because of the following informalities: in claim 4, line 4, the term "or" should be replaced with a comma and in claim 16, line 3, the phrase "diethylene glycol_mono-butyl ether" should be replaced with the phrase "diethylene glycol monobutyl ether".

The following phrase is also being objected to because of the following reason:

(1) in claims 1 and 19, the phrase "preferably Al, Co, Cr, Cu, Fe or Ni"

Applicants should note that the terms "preferably", "more preferably" and "such as" and the phrases that follow them do not further limit the claims. For example, in claim 1, it is the examiner's position that the Met substituent is any metal atom and the remaining metals after the term "preferably" does not extend the scope of that claim. The examiner suggests the deletion of the above phrase and adding the limitation as a new dependent claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 2, 4, 16 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 19, the phrase "(D) a trisazo black dye of the following structure...M is ammonium, H, K, Li or Na" is considered vague and indefinite since it is unclear whether the black dye is a component of the yellow ink (as the claim now suggests) or if the component D of the ink set is a black ink containing the black dye (as suggested by the specification on page 4). It appears to the examiner that applicants intended to claim an ink set including a black ink containing the black dye of the formula as claimed and examined as such. Please clarify.

In claim 2, the phrase "wherein the dye is present in the ink in a concentration of 0.1% to 15% by weight of the ink composition" is considered confusing since it is unclear as to which dye from claim 1 applicants are referring to that is present in the ink. Is each dye in each ink present in that amount or is it a specific dye in a specific ink that is present in this amount? The examiner assumed applicants intended that each dye on each ink is present in this amount and examined as such. Please clarify.

In claim 4, the terms "Kodak Lightfast Magenta 1 (CAS #251959-65-6)", "CAS #182061-89-8", "Nippon Kayaku JPD EK-1 (CAS #224628-70-0)" and "CAS #212080-60-9" are considered indefinite since the relationship between a trademark and the product it identifies is sometimes indefinite, uncertain or arbitrary. The formula or characteristics of the product may change from time to time and yet it may be sold under the same trademark. In the claims, every element or ingredient of the ink should be set forth in positive, exact, intelligible language, so that there will be no uncertainty as to what is meant. Arbitrary trademarks, which are liable to mean different things at

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the pleasure of manufactures, do not constitute such language. See *Ex parte Kattwinkel*, 12 U.S.P.Q. 11 and MPEP 608.01(v).

In claim 16, the phrase "selected from" is considered indefinite since this is improper Markush language. It is the examiner's position that other materials could be present in the Markush group that were not intended by applicants by the use of the phrase "selected from" since this phrase does not exclude other materials. The examiner suggests the language "selected from the group consisting of" in place of this phrase.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4, 8, 14-21 and 23 of copending Application No. 10/695,165 (US 2005/0087099). Although the conflicting claims are not identical, they are not patentably distinct from each other

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because the claims of the present application overlap said patent claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

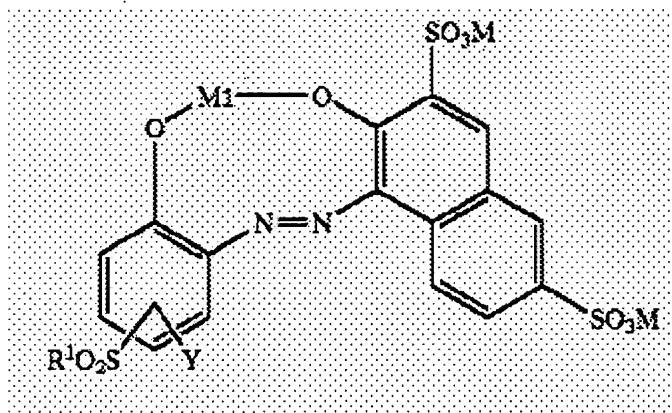
Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-5 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/094943 (US 2004/0128775 is English equivalent).

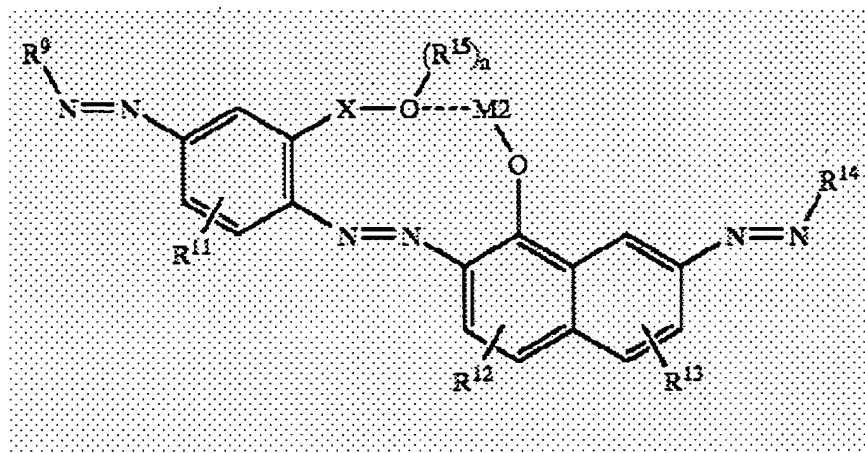
WO 02/094943 teaches dye mixtures consisting essentially of one or more dyes of the formula



wherein Y is H, C₁-C₆ alkyl, C₁-C₆ alkoxy or halo; R¹ is OM, CH=CH₂, CH₂CH₂OR², CH₂CH₂NR³R⁴, CH₂CH₂SR⁵ or CH₂CH₂CR⁶R⁷R⁸; R² is H, SO₃M, C₁-C₆ alkyl, etc.; R³ to

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R^8 are H, C_1 - C_6 alkyl, etc.; M1 is Cu, Co, Ni, Fe, Cr or Al and M is H or a monovalent metal cation and one or more dyes of the formula



wherein R^9 is a C_6 - C_{14} aryl substituted one or more times by OM, $O(C_1$ - $C_6)$ alkyl, COOM, SO_3M or NH_2 ; R^{11} , R^{12} and R^{13} are identical or different and are H, $O(C_1$ - $C_6)$ alkyl, $(C_1$ - $C_6)$ alkyl, COOM or SO_3M ; R^{14} is phenyl, pyridyl or pyrazole radical substituted one or more times by OM, $O(C_1$ - $C_6)$ alkyl, COOM, SO_3M or NH_2 , $NH(C_6$ - $C_{10})$ aryl, $NH(C_1$ - $C_6)$ acyl or phenylsulfo; M2 is Al, Cr, Fe, Co, Ni or Cu; R^{15} is $(C_1$ - $C_6)$ alkyl, n is 0 or 1; X is a chemical bond, -CO- or - SO_2 - and M is H or a monovalent metal cation. WO 02/094943 further teaches an ink jet ink composition comprising 0.1-50% by weight of the above dye mixture, 0-99% by weight water, 0.5-99.5% by weight of organic solvent and/or humectants such as glycerol, diethylene glycol, triethylene glycol, urea etc. and optionally a nonionic surfactant. The above ink jet ink composition may also be used as the black ink in an ink set. The ink set additionally comprises a magenta ink containing a magenta dye such as Reactive Red 23 (i.e. anthrapyridone, metal complex or azo-naphthol magenta dye), a cyan ink containing a cyan dye such as Direct Blue 199 (i.e. sulfonated copper phthalocyanine dye) and a yellow ink containing a yellow

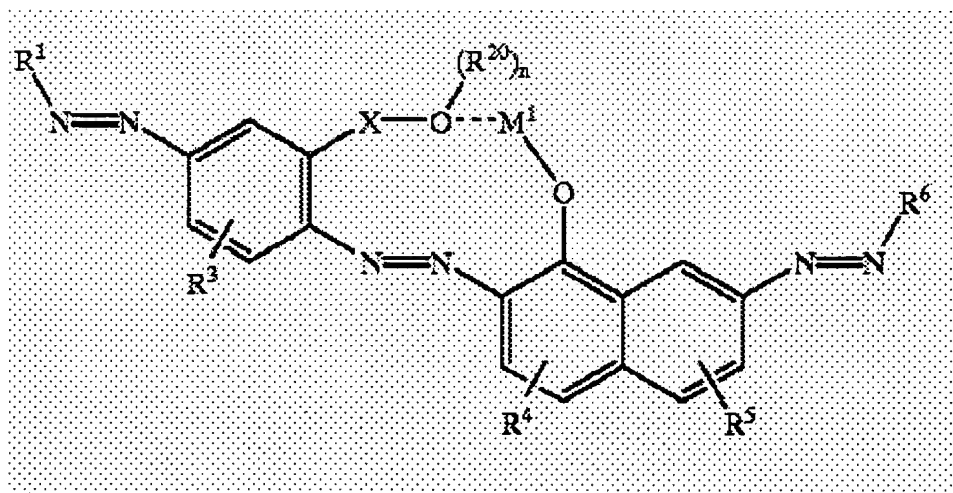
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dye such as Direct Yellow 86 or Direct Yellow 132 (i.e. azo-aniline or metal complex yellow dye). The above ink and ink set may be used in typical ink jet printing processes. See paras. 0012-0045, formulas (5e), (5f), (5g), (5i) and (5k), para. 0052, paras. 0057-0060, para. 0065, examples 1-10 and claims 1, 4 and 8-12 of US 2004/0128775. WO 02/094943 fails to specifically exemplify an ink set comprising a cyan ink comprising a sulfonated copper phthalocyanine dye, a magenta ink comprising an anthrapyridone, metal complex or azo-naphthol magenta dye, a yellow ink comprising an azo-aniline or metal complex yellow dye or a black ink comprising the above trisazo dye as claimed by applicants.

Therefore, it would have been obvious to one having ordinary skill in the art to use the specific ink jet ink set as claimed by applicants as WO 02/094943 also discloses the use of this ink jet ink set but fails to show an example incorporating them.

10. Claims 1-5 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geisenberger et al. ('674).

Geisenberger et al. ('674) teach metal complex trisazo dyes of the formula



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wherein R^1 is an aryl substituted one or more times by OH, $O(C_1-C_6)$ alkyl, COOM, SO_3M or NH_2 ; R^3 , R^4 and R^5 are identical or different and are H, $O(C_1-C_6)$ alkyl, (C_1-C_6) alkyl, COOM or SO_3M ; R^6 is phenyl, pyridyl or pyrazole radical substituted one or more times by OH, $O(C_1-C_6)$ alkyl, COOM, SO_3M or NH_2 , $NHaryl$, $NHacyl$ or phenylsulfo; M^1 is Al, Cr, Fe, Co, Ni or Cu; R^{20} is (C_1-C_6) alkyl, n is 0 or 1; X is a chemical bond, -CO- or -SO₂- and M is H or a monovalent metal cation. Geisenberger et al. ('674) further teach an ink jet ink composition comprising 0.1-50% by weight of the above dye, 0-99% by weight water, 0.5-99.5% by weight of organic solvent and/or humectants such as glycerol, diethylene glycol, triethylene glycol, urea etc. and optionally a nonionic surfactant. The above ink jet ink composition may also be used as the black ink in an ink set. The ink set additionally comprises a magenta ink containing a magenta dye such as Reactive Red 23 (i.e. anthrapyridone, metal complex or azo-naphthol magenta dye), a cyan ink containing a cyan dye such as Direct Blue 199 (i.e. sulfonated copper phthalocyanine dye) and a yellow ink containing a yellow dye such as Direct Yellow 86 or Direct Yellow 132 (i.e. azo-aniline or metal complex yellow dye). The above ink and ink set may be used in typical ink jet printing processes. See col. 3, line 20 – col. 4, line 61, compound formulas (8)-(10) and (12), col. 10, lines 43-48, col. 11, line 15 – col. 12, line 18, examples 1, 3, 4, 8, 9 and 11 and claims 1-8 and 11-14. Geisenberger et al. ('674) fail to specifically exemplify an ink set comprising a cyan ink comprising a sulfonated copper phthalocyanine dye, a magenta ink comprising an anthrapyridone, metal complex or azo-naphthol magenta dye, a yellow ink comprising an azo-aniline or

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metal complex yellow dye or a black ink comprising the above trisazo dye as claimed by applicants.

Therefore, it would have been obvious to one having ordinary skill in the art to use the specific ink jet ink set as claimed by applicants as Geisenberger et al. ('674) also discloses the use of this ink jet ink set but fails to show an example incorporating them.

Conclusion

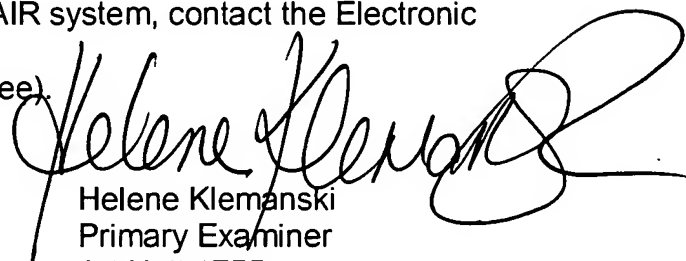
The remaining references listed on forms 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene Klemanski whose telephone number is (571) 272-1370. The examiner can normally be reached on Monday-Friday 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Helene Klemanski
Primary Examiner
Art Unit 1755



HK
June 13, 2005